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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------|----------------------------|----------------------|---------------------|------------------|
| 10/594,653 | 12/08/2008 | Silvio Crotti | 2270-101US | 2222 |
| 25881 EPSTEIN DRA | 7590 03/03/201 NGEL LLP | EXAMINER | | |
| 60 EAST 42ND | STREET | NGUYEN, TU T | | |
| SUITE 2410 NEW YORK, NY 10165 | | | ART UNIT | PAPER NUMBER |
| | | | 2886 | |
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| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 03/03/2011 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mail@ipcounselors.com

| | Application No. | Applicant(s) | | | | |
|--|--|--|--|--|--|--|
| Office Action Ownerson | 10/594,653 | CROTTI, SILVIO | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | TU T. NGUYEN | 2886 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be timil apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | ely filed the mailing date of this communication. (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | |
| | -· action is non-final. | | | | | |
| <i>i</i> — | · · · · · · · · · · · · · · · · · · · | | | | | |
| | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| | , , , | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-26</u> is/are pending in the application. | ☑ Claim(s) <u>1-26</u> is/are pending in the application. | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| | 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>1-26</u> is/are rejected. |)⊠ Claim(s) <u>1-26</u> is/are rejected. | | | | | |
| 7)⊠ Claim(s) <u>4-26</u> is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner | | | | | | |
| 10) ☑ The drawing(s) filed on <u>27 September 2006</u> is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | |
| 11) The oath or declaration is objected to by the Ex | | , , | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| <u> </u> | priority updor 25 LLS C & 110(a) | (d) or (f) | | | | |
| | 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| | a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. | | | | | |
| | | | | | | |
| • | 2. Certified copies of the priority documents have been received in Application No | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | |
| • • | application from the International Bureau (PCT Rule 17.2(a)). | | | | | |
| * See the attached detailed Office action for a list of | of the certified copies not receive | d. | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application | | | | | | |
| Paper No(s)/Mail Date 6) Other: | | | | | | |

DETAILED ACTION

Abstract

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The abstract should be on a separate sheet and the form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.

Claim Objections

Claims 4-26 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim can not depend on a multiple dependent claim 3. See MPEP § 608.01(n). Accordingly, the claims 4-26 not been further treated on the merits.

Claim 1, line 1, the limitation "and/or" should be changed to "or".

For the examination's purpose, claims 4-26 are assumed to be depended on claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al (4,895,029).

With respect to claims 1,13, Yamada discloses a method for detecting defects in, or geometrical characteristics of, at least one joint or splice of sheet pieces 1 (fig 1), in a unloaded state, characterised by the following steps: subjecting said joint or splice 1a (fig 1) to an electromagnetic radiation 2 (fig 1); performing a two-dimensional detection 3 (fig 1) of the radiation reflected or refracted by said joint or splice (figs 4a-d, 19a-c); generating output signals corresponding to said two-dimensional detection; determining possible defects or the geometrical characteristics of at least part of said joint or splice, by analysing said output signals (columns 3-5).

Yamada does not explicitly disclose the radiation is a non-unidirectional radiation. Since Yamada using a light source 2 (fig 1), the claimed non-unidirectional radiation would have been obvious.

With respect to claims 2,14-16, Yamada discloses the radiation being directed both above and below said joint or splice and the radiation reflected or refracted by the joint or splice is detected both above and below said sheet pieces (fig 1).

With respect to claim 3, Yamada discloses the sheet pieces 1 (fig 1) being rubber or other flexible material sheets (column 3, line 42).

With respect to claims 4, 23-24, Yamada does not explicitly stopping the tested sheet. However, Yamada discloses set the sheet into a machine S1 (fig 3). It would have been obvious that Yamada would have to stop the sheet in order to inspect the sheets.

With respect to claims 5,17, Yamada does not disclose the claimed limitations. However, It would have been obvious to modify Yamada by subjecting said joint or splice to a non-unidirectional electromagnetic radiation and of performing a two-dimensional detection of the radiation reflected or refracted by said joint or splice being accomplished after the step of detecting the transit of said at least one splice or joint in correspondence to at least one source of non-unidirectional electromagnetic radiation and to one or more sensors for performing said two-dimensional detection to facilitate the inspection.

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With respect to claim 6, Yamada discloses the output signals being digital signals 4a-f (fig 2). Yamada does not explicitly disclose the claimed Fast Fourier Transformation (FFT). However, the claimed FFT would have been known in processing an image. It would have been obvious to modify Yamada with the claimed FFT to make the measurement more accurate.

With respect to claim 7, Yamada discloses the output signals of said twodimensional detection correspond to an image of at least part of said joint or splice (column 3, lines 35-65).

With respect to claims 8-10, Yamada discloses the claimed image (column 3, lines 35-65). Yamada does not explicitly disclose analyzing the edges. However, it would have been obvious to modify Yamada by analyzing the edges as claimed to measure different characteristics of the joint.

With respect to claim 11, Yamada discloses storing the images 4c (fig 2).

However, Yamada does not disclose a calibrating phase. The claimed calibrating would have been known. It would have been obvious to modify Yamada with the claimed calibrating phase to make the system more accurate.

With respect to claims 12,26, Yamada does not explicitly disclose the nonunidirectional electromagnetic radiation emitting spontaneous. However, it would have been obvious to modify Yamada with the spontaneous radiation for providing better images.

With respect to claim 18, Yamada discloses the sensors being a camera 3 (fig 1).

With respect to claims 19-22, Yamada does not explicitly disclose the types of the sensors or radiation means as claimed. However, it would have been obvious to modify Yamada with different types of sensor or radiation means for inspecting different types of material.

With respect to claim 25, Yamada discloses processing means (fig 3) for analyzing the output signals from said one or more sensors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TU T. NGUYEN whose telephone number is (571)272-2424. The examiner can normally be reached on T-F 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur Chowdhury can be reached on (571) 272-2800 Ext. 86. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 2886

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tu T. Nguyen/ Primary Examiner, Art Unit 2886

02/27/2011